

[TRANSLATION]

State Intellectual Property Office of P. R. China**Text of First Office Action**

Upon examination, the following comments are given for the applicant's consideration.

I

Claim 1 includes two paratactic technical solutions. A thulium-doped fiber laser which operates at least at 2.3 μm band may be excited by two kinds of sources, one of which is to use 1.2 μm -band light source and another of which is to use a pumping source capable of exciting the thulium from one energy level to another energy level. The above technical features such as said thulium-doped fiber laser operating at 2.3 μm band and the laser being excited by a pumping source have been disclosed by Reference 1 (referring to Lines 42-43, Column 2 and Lines 13-15, Column 3 of the Description of Reference 1). The difference between the two paratactic solutions lies in the property of said two pumping sources. No more same or corresponding special technical feature occurs between the two paratactic technical solutions in claim 1. Thus, the two technical solutions do not possess unity under Article 31, Paragraph 1, of the Chinese Patent Law.

The similar comments are given on claims 10 and 19.

II

1. Claim 7 seeks to protect a fiber laser. Reference 1 (US4,967,416) discloses a fiber laser with the following technical features: a host optical fiber is doped with a thulium activator to form a gain medium fiber (referring to Lines 42-43, Column 2 of the Description of Reference 1, which is equivalent to the technical features of claim 7 "a core or a cladding of an optical fiber is doped with a rare-earth element having a laser transition level, and said optical fiber is doped at least with thulium"); a light source 13 produces a 2.3 μm band light (referring to Lines 13-15, Column 3 of the Description of Reference 1, which is equivalent to the technical feature of claim 7 "the thulium-doped fiber laser operates at 2.3 μm band"); and the host optical fiber 15 is fluorozirconate glass fiber (referring to Lines 57-65, Column 2 of the Description of Reference 1, which is equivalent to the last technical feature of claim 7.). Claim 7 differs from Reference 1 in that the fiber laser in claim 7 employs 0.67 μm band or 0.8 μm band light as a pumping source, while the pumping source in Reference 1 is at a wavelength in the range of 680 nm-690 nm. However, it is a common sense for the skilled in the art to select 0.67 μm band or 0.8 μm band light from the above-mentioned band range as a pumping source. Thus, the skilled in the art can apply the above-mentioned common sense to Reference 1 without any inventive effort. Accordingly, claim 7 does not possess inventiveness in absence of any prominent substantive feature and notable progress under Article 22, Paragraph 3, of the Chinese Patent Law.

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2. The additional technical feature of claim 8 "a fluorophosphate glass fiber" has been disclosed by Reference 1 (referring to Lines 57-65, Column 2 of the Description of Reference 1). Accordingly, where claim 7 from which claim 8 depends does not possess inventiveness, claim 8 including the above-mentioned technical feature does not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law, either.

The glass fibers which are not disclosed explicitly in claim 8 are common in the art. Thus, the skilled in the art can anticipate them from Reference 1 without any inventive effort to obtain the fiber laser of claim 8. Accordingly, the rest technical solutions of claim 8 do not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law.

3. The additional technical feature of claim 9 has been disclosed by Reference 1 (referring to Lines 67-68, Column 3 of the Description of Reference 1). Accordingly, where claim 8 from which claim 9 depends does not possess inventiveness, claim 9 does not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law, either.

4. Claim 16 seeks to protect a spontaneous emission source. Reference 1 (US4,967,416) discloses a fiber laser with the following technical features: a host optical fiber is doped with a thulium activator to form a gain medium fiber (referring to Lines 42-43, Column 2 of the Description of Reference 1, which is equivalent to the technical features of claim 16 "a core or a cladding of an optical fiber is doped with a rare-earth element having a laser transition level, and said optical fiber is doped at least with thulium"); a light source 13 produces a 2.3 μm band light (referring to Lines 13-15, Column 3 of the Description of Reference 1, which is equivalent to the technical feature of claim 16 "the spontaneous emission source operates at 2.3 μm band"); and the host optical fiber 15 is fluorozirconate glass fiber (referring to Lines 57-65, Column 2 of the Description of Reference 1, which is equivalent to the last technical feature of claim 16.). Claim 16 differs from Reference 1 in that the spontaneous emission source in claim 16 employs 0.67 μm band or 0.8 μm band light as a pumping source, while the pumping source in Reference 1 is at a wavelength in the range of 680 nm-690 nm. However, it is a common sense for the skilled in the art to select 0.67 μm band or 0.8 μm band light from the above-mentioned band range as a pumping source. Thus, the skilled in the art can apply the above-mentioned common sense to Reference 1 without any inventive effort. Accordingly, claim 16 does not possess inventiveness in absence of any prominent substantive feature and notable progress under Article 22, Paragraph 3, of the Chinese Patent Law.

5. The additional technical feature of claim 17 "a fluorophosphate glass fiber" has been disclosed by

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Reference 1 (referring to Lines 57-65, Column 2 of the Description of Reference 1). Accordingly, where claim 16 from which claim 17 depends does not possess inventiveness, claim 17 including the above-mentioned technical feature does not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law, either.

The glass fibers which are not disclosed explicitly in claim 17 are common in the art. Thus, the skilled in the art can anticipate them from Reference 1 without any inventive effort to obtain the spontaneous emission source of claim 17. Accordingly, the rest technical solutions of claim 17 do not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law.

6. The additional technical feature of claim 18 has been disclosed by Reference 1 (referring to Lines 67-68, Column 3 of the Description of Reference 1). Accordingly, where claim 17 from which claim 18 depends does not possess inventiveness, claim 18 does not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law, either.

7. Claim 25 seeks to protect an optical fiber amplifier. Reference 1 (US4,967,416) discloses a fiber laser with the following technical features: a host optical fiber is doped with a thulium activator to form a gain medium fiber (referring to Lines 42-43, Column 2 of the Description of Reference 1, which is equivalent to the technical features of claim 25 "a core or a cladding of an optical fiber is doped with a rare-earth element having a laser transition level, and said optical fiber is doped at least with thulium"); a light source 13 produces a 2.3 μm band light (referring to Lines 13-15, Column 3 of the Description of Reference 1, which is equivalent to the technical feature of claim 25 "the optical fiber amplifier operates at 2.3 μm band"); and the host optical fiber 15 is fluorozirconate glass fiber (referring to Lines 57-65, Column 2 of the Description of Reference 1, which is equivalent to the last technical feature of claim 25.). Claim 25 differs from Reference 1 in that the optical fiber amplifier in claim 25 employs 0.67 μm band or 0.8 μm band light as a pumping source, while the pumping source in Reference 1 is at a wavelength in the range of 680 nm-690 nm. However, it is a common sense for the skilled in the art to select 0.67 μm band or 0.8 μm band light from the above-mentioned band range as a pumping source. Thus, the skilled in the art can apply the above-mentioned common sense to Reference 1 without any inventive effort. Accordingly, claim 25 does not possess inventiveness in absence of any prominent substantive feature and notable progress under Article 22, Paragraph 3, of the Chinese Patent Law.

8. The additional technical feature of claim 26 "a fluorophosphate glass fiber" has been disclosed by Reference 1 (referring to Lines 57-65, Column 2 of the Description of Reference 1). Accordingly, where claim 25 from which claim 26 depends does not possess inventiveness, claim 26 including the

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above-mentioned technical feature does not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law, either.

The glass fibers which are not disclosed explicitly in claim 26 are common in the art. Thus, the skilled in the art can anticipate them from Reference 1 without any inventive effort to obtain the optical fiber amplifier of claim 26. Accordingly, the rest technical solutions of claim 26 do not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law.

9. The additional technical feature of claim 27 has been disclosed by Reference 1 (referring to Lines 67-68, Column 3 of the Description of Reference 1). Accordingly, where claim 26 from which claim 27 depends does not possess inventiveness, claim 27 does not possess inventiveness under Article 22, Paragraph 3, of the Chinese Patent Law, either.

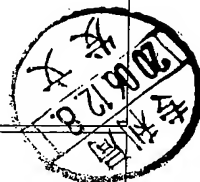
Based on the above reasons, the applicant should respond to this Office Action (OA) and amend the application to remove all defects indicated in the OA. The applicant should amend the description adaptively according to the amended claims. Please be advised that amendments to the application may not go beyond the scope of the disclosure contained in the initial description and claims. The applicant is required to submit a copy of the original documents marked in red for any addition, deletion and replacement. If the applicant makes no amendments to the application or fails to submit a convincing argument, the application will be rejected under Article 38 of the Chinese Patent Law.

Examiner: Xia Xiao

Tel: 82755450



邮政编码: 100098 北京市海淀区知春路甲 48 号盈都大厦 A 座 19A、19B 北京英赛嘉华知识产权代理有限公司 方挺, 葛强	发文日期
申请号: 2004800010154	
申请人: 日本电信电话株式会社	
发明创造名称: 光纤激光器、自发发射光源及光纤放大器	



第一次审查意见通知书

(进入国家阶段的 PCT 申请)

1. ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。
☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局专利局决定自行对上述发明专利申请进行审查。
2. ☒ 申请人要求以其在:
JP 专利局的申请日 2003 年 07 月 28 日为优先权日,
专利局的申请日 年 月 日为优先权日,
专利局的申请日 年 月 日为优先权日。
3. ☐ 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条的规定。
☐ 申请人提交的下列修改文件不符合专利法第 33 条的规定。
☐ 国际初步审查报告附件的中文译文。
☐ 依据专利合作条约第 19 条规定所提交的修改文件的中文译文。
☐ 依据专利合作条约第 28 条或 41 条规定所提交的修改文件。
☐
4. ☐ 审查是针对原始提交的国际申请的中文译文进行的。
☒ 审查是针对下述申请文件进行的:
☒ 说明书 第 2-3, 6-7, 9-13 页, 按照原始提交的国际申请文件的中文译文;
第 页, 按照国际初步审查报告附件的中文译文;
第 1, 4, 5, 8 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;
第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。
☐
☒ 权利要求 第 1-27 项, 按照原始提交的国际申请文件的中文译文;
第 项, 按照依据专利合作条约第 19 条规定所提交的修改文件的中文译文。
第 项, 按照国际初步审查报告附件的中文译文;
第 项, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;
第 项, 按照依据专利法实施细则第 51 条规定所提交的修改文件。
☐
☒ 附图 第 1-3, 6-15 页, 按照原始提交的国际申请文件的中文译文;
第 页, 按照国际初步审查报告附件的中文译文;
第 4, 5 页, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;
第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。



☐

☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

编号

文件号或名称

公开日期 (或抵触申请的申请日)

1

US4967416

1990. 10. 30

5. 审查的结论性意见:

☐ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☐ 说明书不符合专利法第 26 条第 3 款的规定。
- ☐ 说明书不符合专利法第 33 条的规定。
- ☐ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☐ 权利要求 不具备专利法第 22 条第 2 款规定的新颖性。
- ☒ 权利要求 7-9, 16-18, 25-27 不具备专利法第 22 条第 3 款规定的创造性。
- ☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☐ 权利要求 不符合专利法第 26 条第 4 款的规定。
- ☒ 权利要求 1, 10, 19 不符合专利法第 31 条第 1 款的规定。
- ☐ 权利要求 不符合专利法第 33 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。
- ☐ 权利要求 不符合专利法实施细则第 20 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 21 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 22 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 23 条的规定。

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

7. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和 / 或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和 / 或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 3 页, 并附有下述附件:

- ☒ 引用的对比文件的复印件共 1 份 6 页。

☐


审查员: 肖霞(9605)

2006 年 11 月 21 日

审查部门

审查协作中心

21302
2002.8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收
(注: 凡寄给审查员个人的信函不具有法律效力)

或包层部分掺杂具有激光跃迁能级的稀土类元素的光纤作为增益介质，上述光纤中至少掺杂有铥”，见说明书第2栏第42-43行）；光源13产生2.3 μm 波带（相当于“在2.3 μm 波带工作”，见说明书第3栏第13-15行）；主光纤15为氟锆酸盐玻璃光纤（相当于权利要求16最后一个特征，见说明书第57-65行）。权利要求16与对比文件1的区别在于：“采用0.67 μm 波带或0.8 μm 波带的光作为激发光源”，而对比文件1中的光源波带范围在680nm~690nm之间。但是，对于本领域普通技术人员来说，在光源的上述波带范围内选取0.67 μm 波带或0.8 μm 波带的激发作为活性催化剂是本领域的公知常识，因此将其应用于对比文件1中无需创造性劳动。因此权利要求16没有突出的实质性特点和显著的进步，不符合专利法第二十二条第三款创造性的规定。

5. 权利要求17的附加技术特征中的“氟磷酸玻璃光纤”被对比文件1披露了（见说明书第57-65行），因此当其引用的权利要求16没有创造性时，权利要求17包含上述特征的技术方案也不符合专利法第二十二条第三款创造性的规定。

权利要求17中其它没有被明确披露的玻璃光纤都是本领域常用的，无需创造性劳动便可以应用于对比文件1中得到权利要求17中的光纤激光器，因此权利要求17剩余的技术方案不符合专利法第二十二条第三款创造性的规定。

6. 权利要求18的附加技术特征对比文件1披露了（见说明书第3栏第67-68行），因此当其引用的权利要求17没有创造性时，其也不符合专利法第二十二条第三款创造性的规定。

7. 权利要求25请求保护一种光纤放大器，对比文件1（US4967416）公开了一种光纤激光器，并披露了以下技术特征：主光纤掺杂铥激活介质形成增益介质光纤（相当于“纤芯部分或包层部分掺杂具有激光跃迁能级的稀土类元素的光纤作为增益介质，上述光纤中至少掺杂有铥”，见说明书第2栏第42-43行）；光源13产生2.3 μm 波带（相当于“在2.3 μm 波带工作”，见说明书第3栏第13-15行）；主光纤15为氟锆酸盐玻璃光纤（相当于权利要求25最后一个特征，见说明书第57-65行）。权利要求25与对比文件1的区别在于：“采用0.67 μm 波带或0.8 μm 波带的光作为激发光源”，而对比文件1中的光源波带范围在680nm~690nm之间。但是，对于本领域普通技术人员来说，在光源的上述波带范围内选取0.67 μm 波带或0.8 μm 波带的激发作为活性催化剂是本领域的公知常识，因此将其应用于对比文件1中无需创造性劳动。因此权利要求25没有突出的实质性特点和显著的进步，不符合专利法第二十二条第三款创造性的规定。

8. 权利要求26的附加技术特征中的“氟磷酸玻璃光纤”被对比文件1披露了（见说明书第57-65行），因此当其引用的权利要求25没有创造性时，权利要求26包含上述特征的技术方案也不符合专利法第二十二条第三款创造性的规定。

权利要求26中其它没有被明确披露的玻璃光纤都是本领域常用的，无需创造性劳动便可以应用于对比文件1中得到权利要求26中的光纤激光器，因此权利要求26剩余的技术方案不符合

专利法第二十二条第三款创造性的规定。

9. 权利要求27的附加技术特征对比文件1披露了（见说明书第3栏第67-68行），因此当其引用的权利要求26没有创造性时，其也不符合专利法第二十二条第三款创造性的规定。

综上所述，申请人应针对上述缺陷进行修改或陈述理由，并须提交修改对照页，注意修改不要超出原权利要求和说明书的记载范围，并针对修改后的权利要求，对说明书作适应性修改，以使说明书在形式上支持权利要求。如果坚持不改或理由陈述不充分，根据专利法第三十八条的规定，本申请将被驳回。

审查员：肖霞

电话：82755450